Section C.

Review and Organization of Existing Environmental Data for Upper Animas River Watershed

San Juan County, Colorado

Performance Work Statement

30 January 2015

Section 1: Introduction and Background

The US Army Corps of Engineers (USACE), Northwestern Division has an Interagency Agreement (IA) in place with the US Environmental Protection Agency, Region 8 (EPA) for technical assistance. The EPA sent USACE Omaha District funding through this IA to conduct a review and organization of existing data as a preliminary activity to the development of scoping a remedial investigation/feasibility study (RI/FS) and other technical activities at Upper Animas River Watershed for the EPA. This Performance Work Statement (PWS) is for a Firm Fixed Price (FFP) Task Order (TO) on the Base Louisville Multiple Award Task Order Contract (MATOC) for Environmental Services.

1.1. Site Description and Location

The Upper Animas River Watershed has a history of mining activities that have impacted the water quality of the Animas River in southwestern Colorado. The headwaters of the Upper Animas River are located primarily in San Juan County, Colorado; however, a small portion of the headwaters extend into the southern portion of Ouray County and possibly Hinsdale County. The Upper Animas River flows from San Juan County into La Plata County as it winds its way towards Durango, Colorado.

1.2. Basis for Concern

The EPA is concerned with impacts from mining activities to water quality in the Upper Animas River Watershed because the water resources are used by humans and ecological receptors. The EPA's relationship with the community is a critical concern. The community has not been convinced of the need for placing this site on the National Priority List (NPL). The EPA is working with the community on a plan to address the contamination. Because of the sensitivity of the EPA's relationship with the local community, contractors shall avoid local contacts with the Silverton community until directed by the EPA and USACE.

1

1.3. History

The EPA committed in the 1990's to not pursue an NPL designation for the Upper Animas River Watershed, as long as the community based collaborative approach was making progress as demonstrated by water quality improvements in the Animas River. Despite the combined efforts of the Animas River Stakeholder Group (ARSG), the EPA, the US Bureau of Land Management (BLM), the State of Colorado, and other stakeholders to address the water quality in the Upper Animas Watershed, sampling results in the Animas River since 2004 have shown an overall decline in water quality. As a result of this water quality trend, the EPA considered several approaches and chose to prepare a targeted NPL designation for the Upper Cement Creek area. As the EPA was finalizing a package for this proposed targeted listing in 2011, Sunnyside Gold Corporation (SGC), the local government, and ARSG vigorously opposed a proposed listing, and the EPA agreed not to pursue this effort at that time.

Ongoing sampling shows that the water quality in Cement Creek and in the Animas River downstream of Silverton has not improved. In fact, there has been a decline in water quality and aquatic communities observed in the Animas River since water treatment ceased in Upper Cement Creek around 2004. The decline has occurred in spite of numerous voluntary localized efforts to lessen metals loading to the watershed from point and non-point sources, as well as larger-scale efforts conducted by mining companies and land management agencies.

During the past two decades, there have been numerous studies and investigations of the geology, mineralogy, water quality, sediments, and aquatic environment conducted by Federal, State, and Local Governmental agencies, mining industry, and private interest groups. Data has been collected for various purposes and under differing quality assurance requirements.

Section 2: Purpose and Scope

2.1. Purpose

The purpose of this PWS is to acquire a contractor under a MATOC. The contractor shall prepare a Quality Assurance Project Plan (QAPP) to review and organize existing environmental data as the first step towards an RI/FS. This PWS also includes the actual review and organization of the data in a database and an annotated report of the various data sets as to their data usability.

2.2. Scope of Work

Services to be performed under this task order may include, but are not limited to: development of a Quality Management Plan (QMP) and a Uniform Federal Policy Quality Assurance Project Plan (UFP-QAPP) for the required environmental data review and organization. Both plans shall be developed in accordance with Office of Solid Waste and Emergency Response (OSWER) Directive 9272.0-17, June 7, 2005, implementation of the Uniform Federal Policy for Quality Assurance Project Plans. The EPA requirements for Quality Management Plans (QA/R-2) (EPA 2001) can be found at http://www.epa.gov/quality/qs-docs/r5-final.pdf. The EPA Quality Assurance Officer or the

2

Delegated Approval Official must approve the quality assurance documents in writing before measurement, including data review, activities are undertaken.

The scope of the data review and organization will include Mineral Creek, Cement Creek and the Animas River above US Geological Survey (USGS) gaging station A-72 (see Figure 1), primarily in San Juan County, and south down to Durango, Colorado. Recent water quality and aquatic data collected below USGS gaging station A-72 will also be included. Data from studies and investigations from the last 25 to 30 years is the primary focus of this scope of work. In some instances, studies or data prior to that may be relevant.

2.2.1. Task 1 – Preparation of QAPP

The contractor shall prepare a QAPP for the review and organization of existing environmental data and submit the draft QAPP along with the EPA crosswalk form for USACE and EPA review and approval.

Deliverables:

- Draft QAPP 20 calendar days from task order award
- USACE and EPA Review 15 calendar days from submittal of Draft QAPP
- Incorporation of Comments/Final QAPP and Crosswalk 10 calendar days from completion of review
- USACE and EPA Approval 5 calendar days from incorporation of comments

2.2.2. Task 2 – Data Search

The contractor shall perform a comprehensive review of environmental data collected for the Upper Animas River watershed. The sources of existing environmental data include, but are not limited to, the following:

- USGS Professional Paper 1651 "Integrated Investigations of Environmental Effects of Historical Mining in the Animas River Watershed, San Juan County, Colorado" 2007.
- "Use Attainability Analysis" ARSG for the Colorado Water Quality Control Commission.
- ARSG Section 319 sampling and reports.
- Other USGS studies and investigations of the Animas River Watershed.
- Various USEPA sampling projects data is housed in SCRIBE & Storet.
- Ongoing USEPA surface water sampling for the Aquatic Ecological Risk Assessment.
- USEPA data collected for Site Assessment and HRS.
- Environmental data collected by BLM.
- Data and information collected by the Colorado Department of Minerals, Reclamation, and Safety (formerly known as the Colorado Department of Mining and Geology).
- Colorado Division of Game and Fish.
- Sunnyside Gold Company water quality data reports to Colorado Water Quality Control Division.

3

Deliverables:

- Draft Data List and Sources Searched 60 calendar days from task order award
- USACE and EPA Review 15 calendar days from submittal of Draft Data List and Sources Searched
- Final Data List and Sources Searched 15 calendar days from completion of review

2.2.3. Task 3 – Data Organization and Gap Analysis

The contractor shall organize and prepare an annotated report on the data usability of all data sets reviewed. Because of the extensive amount of data collected by numerous organizations, an identification and review of the existing data is essential prior to attempting to scope an RI/FS to understand what data exists and what is already known and the usability of the data either for EPA decision-making, as supporting documentation, or as a "weight of evidence" criteria.

Deliverables:

- Draft Upper Animas Data Report 30 calendar days from submittal of Final Data List and Sources Searched
- USACE and EPA Review 20 calendar days from submittal of Draft Data Report
- Final Upper Animas Data Report 15 calendar days from completion of review

The contractor shall prepare a data gap analysis and planning report. The data gap analysis will identify significant gaps in the available data as compared to the data requirements for an RI/FS. The planning report will identify priorities and strategies for obtaining the additional data necessary to fill the identified data gaps.

Deliverables:

- Draft Data Gap Analysis and Planning Report 30 calendar days from submittal of Draft Upper Animas Data Report
- USACE and EPA Review 15 calendar days from submittal of Draft Gap Analysis and Planning Report
- Final Gap Analysis and Planning Report 15 calendar days from completion of review

2.2.4. Task 4 – Project Management and Meetings

The contractor shall provide project management and meeting (including teleconference) support. The contractor shall prepare monthly reports, attend project meetings (either in person or by teleconference), and prepare and submit invoices to USACE for approval. The contractor shall support monthly teleconferences (1.5 hour duration) with USACE, EPA, and others as necessary.

Deliverables:

• Kick-off Meeting – 1 calendar day

Planning Meeting for RI/FS – The contractor shall support a 1-day meeting with USACE and the EPA in Denver for discussion of preliminary waste characterization and site prioritization for an RI/FS. Contractor's Project Manager, Mining Specialist, Geologist, Hydraulic Engineer, and Chemist shall attend unless advised in advance otherwise. – 1 calendar day

